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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,037	03/11/2004	Vincent P. Walker	00216-667001 / Case 8137	6724

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EXAMINER

LANDRUM, EDWARD F

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,037

Applicant(s)

WALKER, VINCENT P.

Examiner

Edward F. Landrum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/31/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14, and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rozenkranc in view of Aprille et al '293 (U.S Patent No. 5,813,293), hereinafter Aprille '293, in further view of Coffin (U.S Patent No. 6,442,850).

Rozenkranc teaches (See Figure 1) a shaving cartridge with a housing (2). A plurality of blades (3) are located inside the housing (2) as well as a trimming blade (4). The trimming blade defines a second cutting region spaced from the first cutting region. A connecting member (the marked off section closest to the housing 2 in Figure 2) is pivotally connected to the housing (2) through a pair of arms (best seen in Figures 2a and 3a) connected to the body of the connecting member. Recesses associated with stop portions (10 and 11) of the housing (2) work with the terminal portions of each arm to create a normal pivot angle.

Rozenkranc teaches all of the elements of the current invention as stated above except the terminal portions extending from arms that form load-bearing surfaces. The load bearing surfaces are configured to contact the housing only when the housing is pivoted beyond a limit angle greater than the normal pivot angle, the normal pivot angle being about 41 degrees and the limit angle being between about 41.5 and 45 degrees.

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Furthermore, Rozenkranc fails to teach an opening in the body of the connecting member configured to receive a handle interconnect assembly for connecting the cartridge to a handle.

Apprille '293 teaches (see Figures 4 and 13) a connecting member for a shaving assembly comprising arms (28) and terminal portions (72). Furthermore, the connecting member appears to comprise load-bearing surfaces (raised portions to the immediate left and right of hole (74) that appear capable of stopping the shaving cartridge from rotating beyond a certain angle. Furthermore, Apprille '293 teaches recesses (130 and 74) that go through the connecting member for the purpose of attaching a handle to the connecting member (see Figures 16 and 17).

Coffin teaches (Col. 5, lines 4567, Col. 6, lines 1-8; also see Figures 6 and 7) allowing a razor cartridge to pivot around a normal pivot angle (A) and then allow the razor cartridge to further pivot around an angle (B) when the blade cartridge is experiencing maximum applied shaving forces. When experiencing maximum applied shaving forces the blade cartridge contacts a load bearing surface (25).

It would have been obvious to have modified Rozenkranc to incorporate the teachings of Apprille '293 and Coffin to provide a connecting member that protected against housing over-rotating and snapping off the connecting arms by providing a support surface that transferred the force applied by the user to a part of the shaver with a larger cross sectional area and able to handle a larger force, thereby decreasing the likelihood of breaking the connecting arms while shaving. Providing a recess in the connecting member would allow the connecting member to become a "universal

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adapter" by allowing a user to select any number of sized or shaped handles depending on the size of their hand or their personality to let the shaving have a better feel for each individual person.

Regarding the normal pivot angle being between 35 and 45 degrees, but more specifically being about 41 degrees, and the limit angle being greater than 41 degrees, but more specifically between about 41.5 and 45 degrees, it would have been an obvious matter of design choice to find the optimal normal pivot angle to allow a user to properly use both the normal shaving blades and the trimming blades as well as find the optimal limit angle so as to prevent the connecting arms from snapping off between the plunger and the housing as compared to the pivot axis for the purpose of allowing the housing to pivot to both a shaving position and a trimming position while also providing a resistance force against the housing so a user's force applied to the handle could be optimally applied to the housing to thereby reduce the necessary force of the user and possibly aid the user from cutting him or herself.

Furthermore, it would have been an obvious matter of design choice to make the normal pivot angle about 41 degrees and the limit angle between about 41.5 and 45 degrees because discovering the optimal angles for either angle would have been a mere design consideration based on the distance and angle between the shaving blades and the trimming blade as well as various physical properties of the material used for the various parts such as the modulus elasticity. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges only involves routine skill in the art. Further, it has been held that

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discovering an optimum value, or a result effective variable involves only routine skill in the art.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 14, and 18-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Apprille et al '851 (U.S Patent No. 5,956,442) teaches a connecting member with a hole in it for the purpose of connecting a handle. Pina (U.S Patent No. (6,223,442), Andrews (U.S Patent No. 6,161,288), and Coffin (U.S Patent No. 6,560,881) teach a shaving apparatuses with surfaces capable of preventing over-rotation of a shaving head.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EFL  
9/14/2006



BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER